



## F221m

### Fixed Cellular Terminal for residential applications

#### Access to the GSM benefits

The Ericsson Fixed Cellular terminal Triple Band for residential applications – F221m – is the best quality solution for providing access to fixed services either when no traditional fixed infrastructure is available or if an additional phone line is required.

With the F221m terminal, the user does not have to wait for the fixed telephone network infrastructure to be developed as long as GSM services are available in the area.

#### Plug-and-Play

The F221m terminal can be easily installed by the end-user following the instructions provided in the Installation Guide.

Install a terminal, do the cabling from the F221m to any location in your house and you will be ready to connect and use your standard telephones, fax machines and modems in the usual way.

#### Highest standards

The latest technology breakthroughs have been developed and incorporated in the terminal in such a way that they make it ideal for everyday communications. For voice transmission, the Enhanced Full Rate (EFR) speech codec perfectly emulates the fixed-line voice quality.

For data transmission, the F221m terminal features the latest GSM Internet services access technology: HSCSD and GPRS provides a high wireless data rates transmission guarantee and the possibility of always being connected to the net. V.90 data transmission over the line interface qualifies the terminal to support analogue modems, making it ideal for the Internet environment.

#### Features

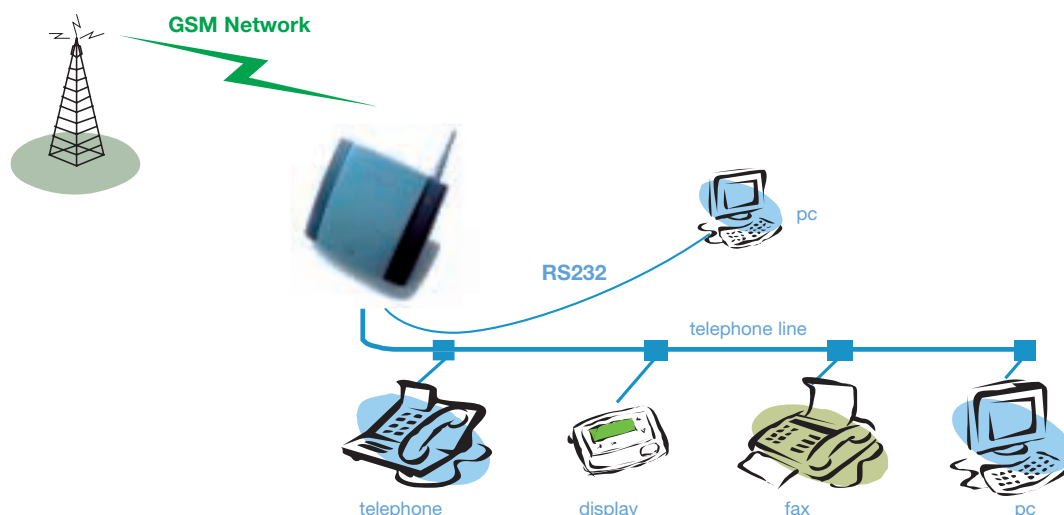
The F221m terminal allows automatic network searching between GSM 900, GSM 1800 and GSM 1900 frequencies, which means worldwide coverage in the GSM network.

The F221m terminal offers a broad range of GSM services such as Prepaid Subscription, Calling Line Identification, Call Waiting, Call Barring, Call Forwarding, SMS capability, Multiparty Conference Calls or Alternate Line Services.

The F221m is equipped with an embedded modem that is available over the RS232 port for PC Fax/Data services and SMS.

The F221m provides a built-in SMS supervision function that allows remote control and supervision of the unit.

## F221m TERMINAL WORKING ENVIRONMENT



### TECHNICAL SPECIFICATIONS

#### GSM AIR INTERFACE

##### Frequency bands

Triple-Band E-GSM 900, GSM 1800 and GSM 1900

##### E-GSM 900

Frequencies: TX 880-915 MHz, RX 925-960 MHz  
RF power: Maximum 2W (33 dBm), Power class 4

##### GSM 1800

Frequencies: TX 1710-1785 MHz, RX 1805-1880 MHz  
RF power: Maximum 1W (30 dBm), Power class 1

##### GSM 1900

Frequencies: TX 1850-1910 MHz, RX 1930-1990 MHz  
RF power: Maximum 1W (30 dBm), Power class 1

**Data capabilities:** Multislot GPRS Class B and HSCSD (Data rates depend on GSM operator services)

**Speech codecs:** Half Rate, Full Rate and Enhanced Full Rate

#### RS232 INTERFACE

Data services: All applicable GSM 7.07 AT commands  
SMS: All applicable GSM 7.05 AT commands

#### TELEPHONE INTERFACE (POTS)

Telephone: Speech  
Analog fax: Group 3 Fax transmission  
Analog data: V.90, V.34, V.32bis, V.32, V.22bis, V.22, V.23, V.21, Bell 212A & 103  
CLI: ETSI DTMF and V.23 FSK; Bellcore FSK  
Line impedance: 600 ohm (default)  
Loop current: 25 mA (off-hook)  
Open loop voltage: 48 V (on-hook)  
Loop resistance: < 650 ohm (off-hook)  
Ringing voltage: 45 Vrms  
Ring load: 3 REN; up to 3 telephone devices

#### FCT INTERFACES

Telephone: RJ11 (a/b 2-wire line); POTS interface  
RS232 port: DB-9 Serial COM interface  
GSM antenna: SMA plug-female (50Ω)  
SIM card: Small plug-in card, 3V or 5V type  
Input Vdc: 7.5 Vdc (±0.4V); 0.8 A (jack: EIAJ RC-5320A class 4, male)

#### ANTENNA (included)

Frequency bands: Triple-Band E-GSM 900, GSM 1800 and GSM 1900  
Characteristics: Omnidirectional

#### POWER SUPPLY (included)

AC input: 100 - 240 Vac; 47-63Hz 3 pole AC inlet connector (IEC 320 power inlet)  
Available plugs: EU, UK, USA, and AU

#### ENVIRONMENTAL

Operating temperature: -10°C to +55°C  
Operating humidity: 20 - 75%  
Storage temperature: -40°C to +85°C  
Storage humidity: 5 - 95%

#### ACCESSORIES

DA20 Display: CLI, SMS receiving and other FCT services  
Battery: Rechargeable 6 Vdc 1.2/1.3 Ah Lead-acid battery  
External antennas: Outdoor omnidirectional and directional  
DC Power supply: Input: 12-24 Vdc; Output: 7.5 Vdc

#### PRODUCT PRESENTATION

Basic kit: F221m residential, power supply, line cable, wall mount bracket, internal antenna, user guide  
FCT size: Height 148 mm, Width 165 mm, Depth 45 mm  
FCT weight: 300 grams

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